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EXAMINER	
DHINGRA, PAWANDEEP	
ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/696,902	RODRIGUEZ ET AL.	
	Examiner	Art Unit	
	PAWANDEEP S. DHINGRA	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

- This action is responsive to the following communication: Amendment after non-final action filed on 6/27/2008.
- Claims 1-25 are pending.

Response to arguments

Applicant's arguments filed on 6/27/2008 have been fully considered but they are not persuasive.

Applicant argues that Owen does not teach a replaceable component comprising a microprocessor.

In reply, examiner asserts that Owen clearly teaches a replaceable component comprising a microprocessor (see figures 3-4 with corresponding text; claim 4; element 144 in fig, 3; element 412 in fig. 4).

Applicant further argues that Owen fails to teach a replaceable module having a processor element on board the replaceable module.

In reply, examiner asserts that Owen clearly teaches a replaceable module having a processor element on board the replaceable module (see figures 3-4 with corresponding text; claim 4; element 144 in fig, 3; element 412 in fig. 4).

Claim Rejections - 35 USC § 112

Previous 112 rejections to claim 8 have been withdrawn in view of applicant's amendments to the specification.

Examiner Notes

Examiner cites particular paragraphs, columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 7, 9-13, and 15 are rejected under 35 U.S.C. 103 as being unpatentable over Richards et al., US 6,532,351 in view of Owen et al., US 2004/0080775 further in view of Hirst el al., US 5,930,553.

Re claim 1, Richards et al. discloses a replaceable module (see abstract) for a printing apparatus with programmable software controls (see figure 2; abstract, note chip is programmable), the module comprising: an internal memory for holding stored

instructions (see abstract; column 4, lines 4-64) (see also column 3, line 20-column 5, line 32); a communications interface for exchanging information with the printing apparatus (see figures 1-2; abstract; column 5, line 33-column 6, line 9); and, a chip (microchip or Integrated Circuit, see element 32, figure 2) connected to the internal memory (element 34, figure 2), and the communications interface (element 30, figure 2) (see column 5, line 33-column 6, line 56).

Richards et al. fails to explicitly disclose the module comprising: a peripheral memory holding a software upgrade for the printing apparatus programmable software controls; and a microprocessor connected to the internal memory, the peripheral memory and the communications interface, the microprocessor performing the stored instructions to install the software upgrade into the printing apparatus via the communications interface when the replaceable module is installed in the printing apparatus, so that a field engineer or other individual need not perform the software upgrade for the printing apparatus.

However, Owen et al. discloses a replaceable module (see abstract), the module comprising: a microprocessor (note that processor is a microprocessor) connected to the internal memory, the peripheral memory and the communications interface (see figures 3-4; paragraphs 18-27).

Hirst et al. discloses a peripheral memory holding a software upgrade for the printing apparatus programmable software controls (see column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20); and a microprocessor connected to the internal memory, the peripheral memory and the communications interface (see column

2, line 31-column 3, line 54; column 4, line 8-column 6, line 20), the microprocessor performing the stored instructions to install the software upgrade into the printing apparatus via the communications interface (see abstract; figures 4-6; column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20) when the replaceable module is installed in the printing apparatus, so that a field engineer or other individual need not perform the software upgrade for the printing apparatus (see figures 1-2, 4-6; column 1, line 15-column 3, line 54; column 4, line 8-column 6, line 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 2, Richards et al. further discloses the communications interface comprises a wired communication element (see column 5, line 33-column 7, line 14).

Re claim 3, Richards et al. further discloses the communications interface comprises a wireless communication element (see column 5, line 33-column 7, line 14).

Re claim 4, Richards et al. fails to further disclose a peripheral memory interface, where the microprocessor is connected to the peripheral memory through the peripheral memory interface.

However, Owen et al. discloses a peripheral memory interface, where the microprocessor is connected to the peripheral memory through the peripheral memory interface (see figures 3-4; paragraphs 18-27).

Hirst et al. discloses a peripheral memory interface, where the microprocessor is connected to the peripheral memory through the peripheral memory interface (see abstract; column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would

be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 7, Richards et al. fails to further disclose the peripheral memory comprises nonvolatile integrated circuit chip memory.

However, Owen discloses the peripheral memory comprises nonvolatile integrated circuit chip memory (see figure 3; paragraph 18).

Hirst et al. discloses the peripheral memory comprises nonvolatile integrated circuit chip memory (see column 4, line 8-column 6, line 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host

device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 9, Richards et al. discloses a printing apparatus (see figure 1), a method of operating a replaceable module (see abstract, and claims 1-2), the method comprising: installing the replaceable module in the printing apparatus (see abstract, figures 1-3, claims 1-2);

Richards et al. fails to further disclose allowing a processor element on board the replaceable module to interrogate the printing apparatus; determining which software components in the printing apparatus need to be upgraded; accessing memory for any necessary software code components for an upgrade; and, installing the software code into the printing apparatus by the processor element in the replaceable module so that a field engineer or other individual need not perform the software upgrade for the printing apparatus.

However, Owen et al. discloses allowing a processor element on board the replaceable module to interrogate the printing apparatus (see figures 3-4; element 144 in fig, 3; element 412 in fig. 4; paragraph 27; claim 4, note that processor interrogates the memory of printing apparatus for which application to execute according to the request made by the host). Owen further discloses installing the replaceable module in the printing apparatus; the replaceable module comprising a processor element (see claim 4; element 412 in fig. 4) and executing an software application by the processor element (see figures 3-4 with corresponding text; claim 4).

Hirst et al. discloses installing the replaceable module in the printing apparatus (see figures 1-2, 4-6; column 1, line 15-column 3, line 54; column 4, line 8-column 6, line 20); determining which software components in the printing apparatus need to be upgraded (see figures 4-6) (see also abstract; column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20); accessing memory for any necessary software code components for an upgrade (see figures 4-6) (see also abstract; column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20); and, installing the software code into the printing apparatus (see figures 4-6) (see also abstract; column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20) by the processor element in the printing apparatus so that a field engineer or other individual need not perform the software upgrade for the printing apparatus (see figures 1-2, 4-6; column 1, line 15-column 3, line 54; column 4, line 8-column 6, line 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would

be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 10, Richards et al. fails to further disclose the processor element is a microprocessor.

However, Owen et al. discloses the processor element is a microprocessor (see paragraph 27, note that processor is a microprocessor).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 11, Richards et al. discloses the memory that is accessed is internal (see column 5, line 33-column 6, line 56).

Hirst et al. discloses the memory that is accessed is internal (see figures 4-6).

Owen et al. discloses accessing the internal memory (see figures 3-4; paragraphs 18-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 12, Richards et al. fails to further disclose the memory that is accessed is external.

Hirst et al. discloses the memory that is accessed is external (see figures 4-6; column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20).

Owen et al. discloses accessing the external memory (see figures 3-4; paragraphs 18-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 13, Richards et al. further discloses the memory is accessed via a network connection (see column 5, line 33-column 7, line 14).

Hirst et al. discloses the memory is accessed via a network connection (see figures 4-6; column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20).

Owen et al. discloses accessing the memory via a network connection (see figures 3-4; paragraphs 18-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 15, Richards et al. further discloses the network connection access is accomplished by a wireless communication element (see column 5, line 33-column 7, line 14).

3. Claims 5-6, 8, and 14 are rejected under 35 U.S.C. 103 as being unpatentable over Richards et al., US 6,532,351 in view of Owen et al., US 2004/0080775 further in view of Hirst el al., US 5,930,553 further in view of well known art.

Re claim 5, 6 & 8, Richards fails to further disclose that the peripheral memory comprises flash memory, flashcards or bubble memory.

Owen discloses "Other fixed media and removable media memory devices 28 are optionally included in host computer 20D. The memories 22 and 28, which provide data storage mechanisms, can be read-only memory (ROM), random access memory (RAM), a hard drive, a floppy disk drive, a CD-ROM drive, and other conventional memory device" (see paragraph 18).

However, Official Notice is taken to note that ability to use variety of different types of memory's is notoriously well known and commonly used in the art. It would have been obvious to include a flash memory, flashcards or bubble memory as non-volatile peripheral memory or as removable media memory devices 28 in the system of Owen for the benefit of providing the user with increased flexibility and options to use other conventional memory devices (see Owen, paragraph 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component

without requiring a printing device" as taught by Owen in paragraph 3, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 14, Richards et al. fails to further disclose the memory is comprised of flashcards.

However, Official Notice is taken to note that ability to use variety of different types of memory's is notoriously well known and commonly used in the art. It would have been obvious to include a flashcards as an external memory in the system of Hirst for the benefit of providing the user with increased flexibility and options to use other conventional memory devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, and "to provide more direct communication with the manufacturers of the consumable components

regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

4. Claims 16-22 are rejected under 35 U.S.C. 103 as being unpatentable over Richards et al., US 6,532,351 in view of Owen et al., US 2004/0080775 further in view of Rasche et al., US 7,262,873 further in view of McIntyre, US 2003/0063305 further in view of Hirst el al., US 5,930,553.

Re claim 16, Richards et al. discloses a printing apparatus (see figure 1), a method of operating a replaceable module, the method comprising: installing the replaceable module in the printing apparatus (see abstract, figures 1-3, claims 1-2).

Richards fails to further disclose a method of operating a replaceable module having a processor element on board the replaceable module, the method comprising: placing the printing apparatus into diagnostic mode; allowing a processor element on board the replaceable module to interrogate the printing apparatus; determining from the interrogation which software components in the printing apparatus need to be upgraded; scheduling as determined by the processor element when a software upgrade should occur; accessing memory as directed by the processor element for

necessary software code components for an upgrade; and, installing the software code into the printing apparatus by the processor element in the replaceable module so that a field engineer or other individual need not perform the software upgrade for the printing apparatus.

However, Owen discloses a method of operating a replaceable module having a processor element on board the replaceable module (see abstract figures 3-4; element 144 in fig, 3; element 412 in fig. 4; paragraph 27, claim 4), the method comprising: allowing a processor element on board the replaceable module to interrogate the printing apparatus (see figures 3-4, paragraph 27). Owen further discloses installing the replaceable module in the printing apparatus; the replaceable module comprising a processor element (see claim 4; element 412 in fig. 4) and executing a software application by the processor element (see figures 3-4 with corresponding text; claim 4).

Rasche et al. discloses placing the printing apparatus (photocopier 30) into diagnostic mode before allowing a processor element of server 50 to interrogate the printing apparatus (see column 2, lines 8-15; column 8, lines 15-48).

McIntyre discloses scheduling as determined by the processor element (see paragraphs 21, 36) when a software upgrade should occur (see paragraphs 13, 37; claim 10).

Hirst et al. discloses installing the replaceable module in the printing apparatus (see figures 1-2, 4-6; column 1, line 15-column 3, line 54; column 4, line 8-column 6, line 20); interrogating the printing apparatus (see figure 5); determining from the

interrogation which software components in the printing apparatus need to be upgraded (see figures 4-6) (see also abstract; column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20); accessing memory as directed by the processor element (processor of image forming computer, see figure 5) for necessary software code components for an upgrade (see figures 4-6) (see also abstract; column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20); and, installing the software code into the printing apparatus (see figures 4-6) (see also abstract; column 2, line 31-column 3, line 54; column 4, line 8-column 6, line 20) by the processor element in the printing apparatus so that a field engineer or other individual need not perform the software upgrade for the printing apparatus (see figures 1-2, 4-6; column 1, line 15-column 3, line 54; column 4, line 8-column 6, line 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst, printer diagnostics techniques as taught by Rasche, and techniques for updating printer's firmware as taught by McIntyre for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, to provide an improved stand-alone printer which when diagnosed can provide useful statistical data as taught by Rasche at column 2, lines 8-15; column 8, lines 15-63, "to provide a system whereby customized, default printer control panel settings are restored while minimizing losses in material or human

resources resulting from changed default settings. Preferably, such a system would enable both automatic and manual restoration or reconfiguration of the control panel settings of one or more printers. Additionally, the ability to allow a user to restore or reconfigure the control panel settings of one or more printers without having to individually adjust the control panel settings of each of the affected printers is desirable" as taught by McIntyre in paragraph 8, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Claims 17-22, claims 17-22 are essentially similar to claims 10-15 and are rejected on the same grounds (see explanation of claims 10-15 given above).

5. Claims 23-25 are rejected under 35 U.S.C. 103 as being unpatentable over Richards et al., US 6,532,351 in view of Owen et al., US 2004/0080775 further in view of Rasche et al., US 7,262,873 further in view of McIntyre, US 2003/0063305 further in view of Hirst el al., US 5,930,553 further in view of well known art.

Re claim 23, Richards fails to further disclose the interrogation further comprises gathering machine and software version indicia, model number, serial number, and

other identifying information, as would be desirable for completing an inventory of machines in the field.

Rasche et al. discloses interrogating the printing apparatus (photocopier 30) (see column 8, lines 15-48) wherein the interrogation further comprises gathering machine (check on electronic hardware) and software version indicia (code version), and other identifying information, as would be desirable for completing an inventory of machines in the field (see column 8, lines 15-48). Rasche fails to explicitly teach gathering the machine model number, and serial number.

However, Official Notice is taken to note that ability to gather model number, and serial number of a machine in addition to other information pertaining to performing software update checks is notoriously well known and commonly used in the art. It would have been obvious to gather machine model number, and serial number in addition to other identifying information in the system of Rasche for the benefit of keeping track of which serial and model number machines have been updated or need software updates (see Rasche, column 8, lines 15-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst, printer diagnostics techniques as taught by Rasche, and techniques for updating printer's firmware as taught by McIntyre for the benefit of having "improved methods, replaceable components, and systems that provide communication with

memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, to provide an improved stand-alone printer which when diagnosed can provide useful statistical data as taught by Rasche at column 2, lines 8-15; column 8, lines 15-63, "to provide a system whereby customized, default printer control panel settings are restored while minimizing losses in material or human resources resulting from changed default settings. Preferably, such a system would enable both automatic and manual restoration or reconfiguration of the control panel settings of one or more printers. Additionally, the ability to allow a user to restore or reconfigure the control panel settings of one or more printers without having to individually adjust the control panel settings of each of the affected printers is desirable" as taught by McIntyre in paragraph 8, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 24, Richards fails to further disclose the identifying information is passed via the network connection.

However, Rasche et al. further discloses the identifying information is passed via the network connection (see column 3, lines 14-36; column 8, lines 15-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst, printer diagnostics techniques as taught by Rasche, and techniques for updating printer's firmware as taught by McIntyre for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, to provide an improved stand-alone printer which when diagnosed can provide useful statistical data as taught by Rasche at column 2, lines 8-15; column 8, lines 15-63, "to provide a system whereby customized, default printer control panel settings are restored while minimizing losses in material or human resources resulting from changed default settings. Preferably, such a system would enable both automatic and manual restoration or reconfiguration of the control panel settings of one or more printers. Additionally, the ability to allow a user to restore or reconfigure the control panel settings of one or more printers without having to individually adjust the control panel settings of each of the affected printers is desirable" as taught by McIntyre in paragraph 8, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a

robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Re claim 25, Richards fails to further disclose the identifying information is stored in memory on the replaceable module.

Hirst et al. discloses the identifying information (user settings) is stored in memory on the replaceable module (see figure 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to modify the replacement module and its system as disclosed by Richards to include the techniques for operating printing consumables as taught by Owen and Hirst, printer diagnostics techniques as taught by Rasche, and techniques for updating printer's firmware as taught by McIntyre for the benefit of having "improved methods, replaceable components, and systems that provide communication with memory in a replaceable component without requiring a printing device" as taught by Owen in paragraph 3, to provide an improved stand-alone printer which when diagnosed can provide useful statistical data as taught by Rasche at column 2, lines 8-15; column 8, lines 15-63, "to provide a system whereby customized, default printer control panel settings are restored while minimizing losses in material or human resources resulting from changed default settings. Preferably, such a system would enable both automatic and manual restoration or reconfiguration of the control panel settings of one or more printers. Additionally, the ability to allow a user to restore or reconfigure the control panel settings of one or more printers without having to

individually adjust the control panel settings of each of the affected printers is desirable" as taught by McIntyre in paragraph 8, and "to provide more direct communication with the manufacturers of the consumable components regarding the consumption rates, installation and exhaustion dates and other key information. Additionally, it would be advantageous to be able to provide software patches and updates to the office automation and image forming devices. Also, it would be advantageous to provide a robust two way communications link between a host device and image forming and office automation devices" as taught by Hirst at column 2, lines 19-29.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rasche et al. (US 7,262, 873) discloses several memory types (Flash, Flash cards, etc.) used in printer environment.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAWANDEEP S. DHINGRA whose telephone number is (571)270-1231. The examiner can normally be reached on M-F, 9:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. D./
Examiner, Art Unit 2625

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625